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EXAMINER

CINTINS, IVARS C

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/033,331

Applicant(s)

PETERSON ET AL.

Examiner

Ivars C. Cintins

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1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 20-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 6) ☐ Other: \_\_\_\_

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The disclosure is objected to because the specification fails to contain a reference to Applicant's provisional application, as required by 37 CFR 1.78(a)(5)(i). Appropriate correction is required.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-19, drawn to a method for a method for treating water, classified in class 219, subclass 662.
- II. Claims 20-31, drawn to a fluid purification apparatus, classified in class 210, subclass 96.1.

The inventions are distinct, each from the other because:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus of Group II could be used to carry out another process, different from that of Group I. For example, this device could be used to purify fluids (e.g. air, oil, etc.) other than water.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and divergent subject matter, and because the searches for the individual Groups are not coextensive, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. John R. Hlavka on December 18, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-19. Affirmation of this election must be made by Applicant in replying to this Office action. Claims

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20-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Megonnell et al. (U.S. Patent No. 6,214,212) in view of Higgins et al. (U.S. Patent No. 5,078,889). Megonnell et al. discloses a method for treating water (see col. 1, lines 7-8, 17 and 23-28) with a water treatment material including carbon (see col. 2, lines 37-38) in a treatment tank (see col. 3, lines 7 and 38). Accordingly, this primary reference discloses the claimed invention with the exception of the recited regeneration step. Higgins et al. discloses removing hydrogen sulfide from water with an adsorbent, and subsequently regenerating the adsorbent with an oxidizing agent such as sodium hypochlorite (col. 7, line 67) or peroxide (col. 7, line 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to regenerate the catalytic carbon of the primary reference in the manner taught by Higgins et al., in order to enable reuse of this primary reference material.

Claims 1-5, 7-11, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Megonnell et al. and Higgins et al. as applied above, and further in view of Prior et al. (U.S. Patent No. 3,891,552). The modified primary reference discloses the claimed invention with the exception of the recited multiple tank system. Prior et al. discloses a multi-tank water treatment system, and further discloses controlling the flow of source water and regeneration fluid in the

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recited manner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a plurality of treatment tanks in the system of the modified primary reference, and to control regeneration of these tanks in the manner taught by Prior et al., in order to improve the efficiency of this modified primary reference system.

Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Megonnell et al., Higgins et al. and Prior et al. as applied above, and further in view of Roberts (U.S. Patent No. 2,855,364). The modified primary reference discloses the claimed invention with the exception of the recited water washing step prior to regeneration. Roberts teaches passing water through a bed of ion exchange material prior to regeneration, in order to thoroughly wash the particles in this bed (see Fig. 2; and col. 5, lines 29-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to wash the catalytic carbon bed of the modified primary reference prior to its regeneration, in the manner suggested by Roberts, in order to dislodge any entrapped dirt particles from this bed.

Schoeffel et al. (U.S. Patent No. 3,386,922) and Yan (U.S. Patent No. 5,112,494) disclose regenerating carbonaceous adsorbents with oxidizing agents. Hayden (U.S. Patent No. 5,352,370) discloses removing sulfur containing contaminants from a fluid with catalytic carbon. Izumi et al. (U.S. Patent No. 6,503,469) discloses removing a sulfur containing contaminant from a fluid with a plurality of adsorbent beds, and regenerating the adsorbent beds with an oxidizing agent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr.

Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0987.



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
December 22, 2003